Figure 1

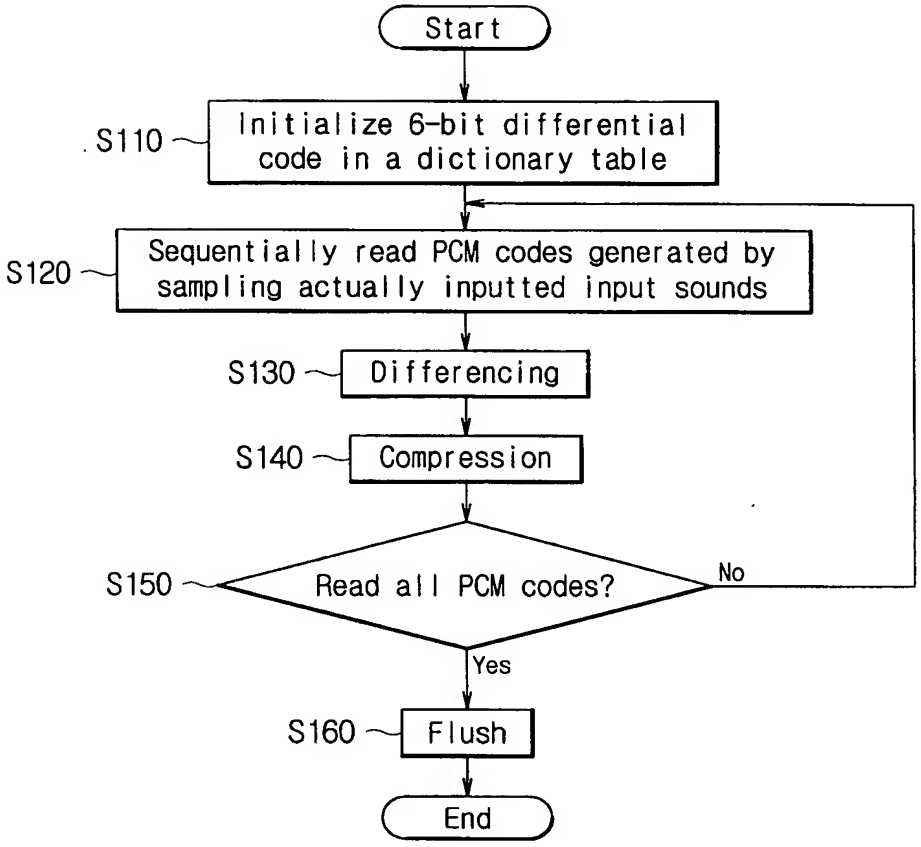

Start
S110
Initialize 6-bit differential code in a dictionary table
S120
Sequentially read PCM codes generated by sampling actually inputted input sounds
S130
Differencing
S140
Compression
S150
Read all PCM codes?
No
Yes
S160
Flush
End

Figure 2

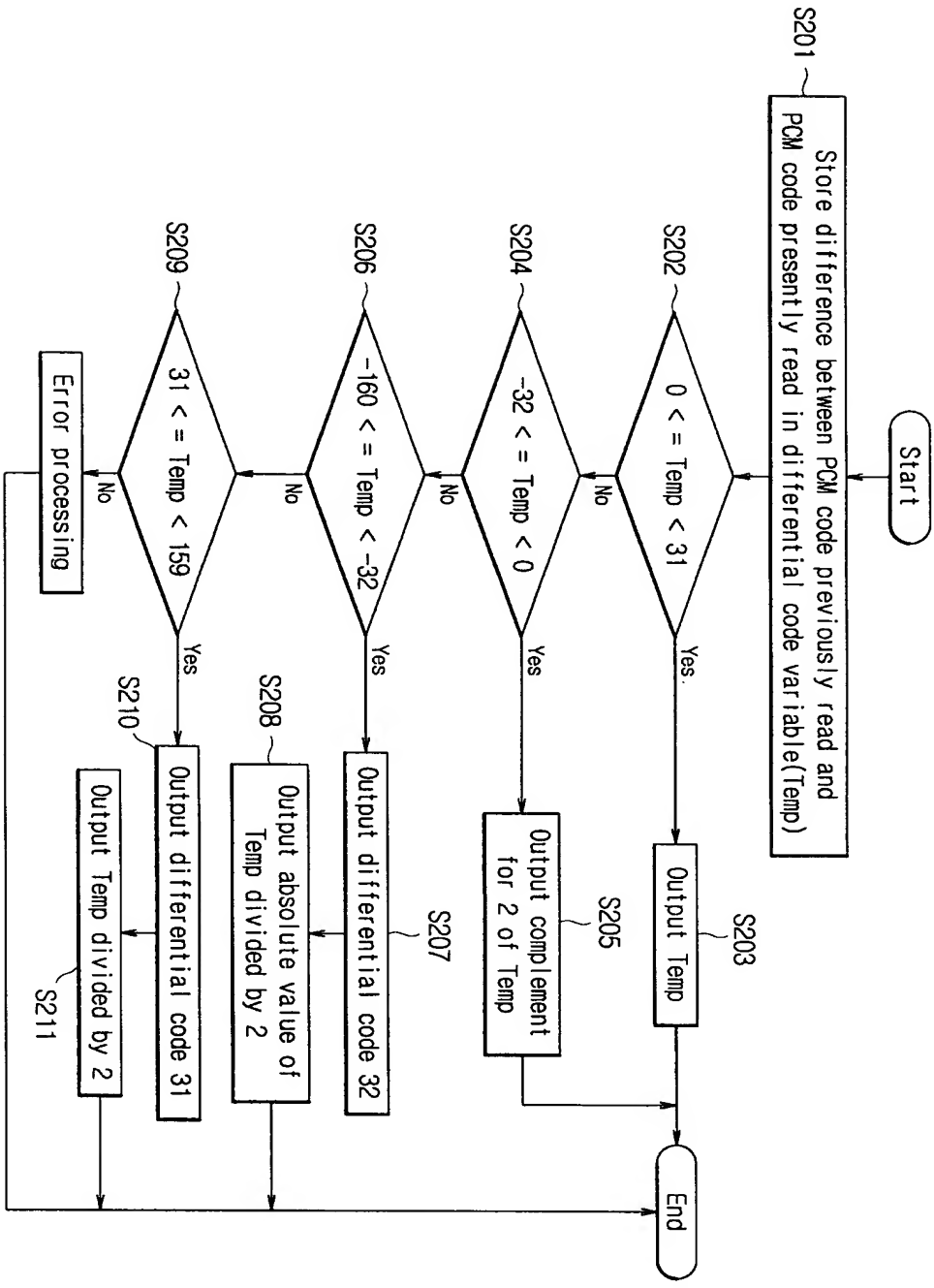

Start
S201
Store difference between PCM code previously read and PCM code presently read in differential code variable(Temp)
S202
0 < = Temp < 31
Yes
S203
Output Temp
No
S204
-32 < = Temp < 0
Yes
S205
Output complement for 2 of Temp
No
S206
-160 < = Temp < -32
Yes
S207
Output differential code 32
No
S208
Output absolute value of Temp divided by 2
S209
31 < = Temp < 159
Yes
S210
Output differential code 31
No
Error processing
S211
Output Temp divided by 2
End

Figure 3

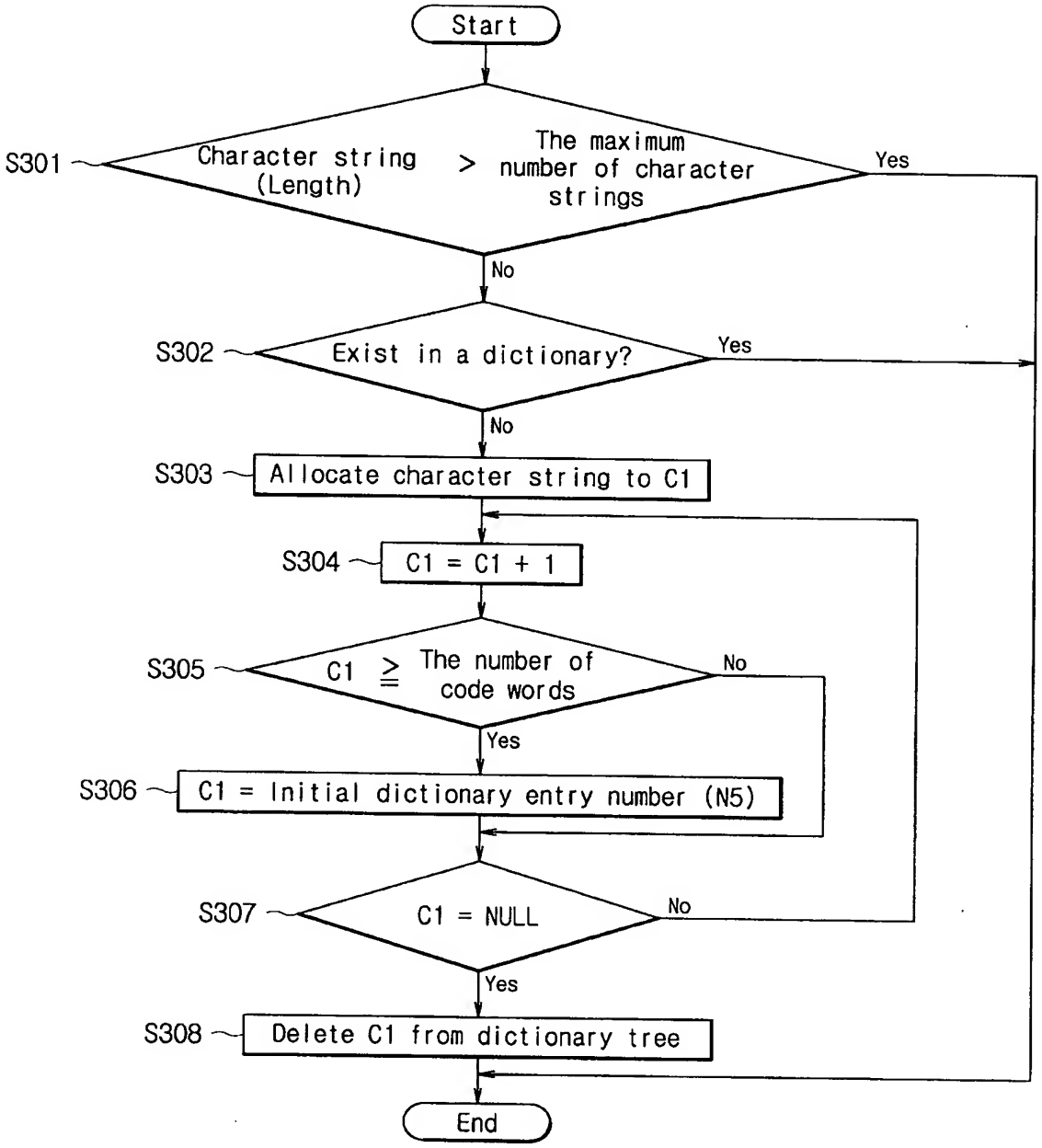

Start
S301
Character string (Length)
>
The maximum number of character strings
Yes
No
S302
Exist in a dictionary?
Yes
No
S303
Allocate character string to C1
S304
C1 = C1 + 1
S305
C1 ≧ The number of code words
No
Yes
S306
C1 = Initial dictionary entry number (N5)
S307
C1 = NULL
No
Yes
S308
Delete C1 from dictionary tree
End

Figure 4

code word	outputted code word bit	decimal value
0	000000000	0
1	000000001	1
2	000000010	2
⋮	⋮	⋮
273	100010001	273
274	1000100100	548(274+274)
275	1000100110	549(274+275)
⋮	⋮	⋮
749	1111111111	1023(274+749)

Figure 5

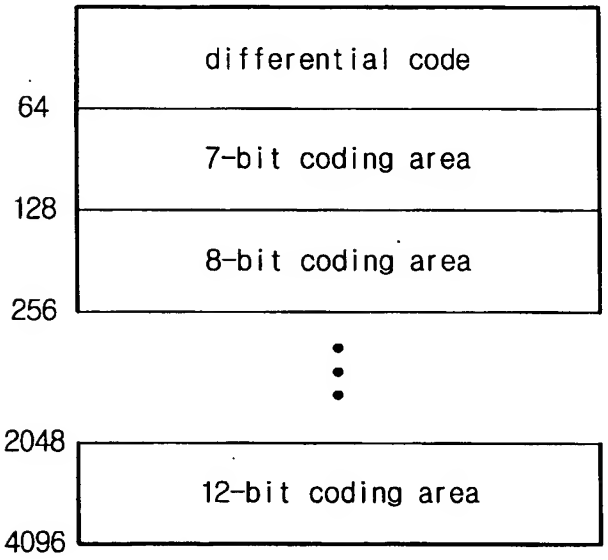


Figure 6

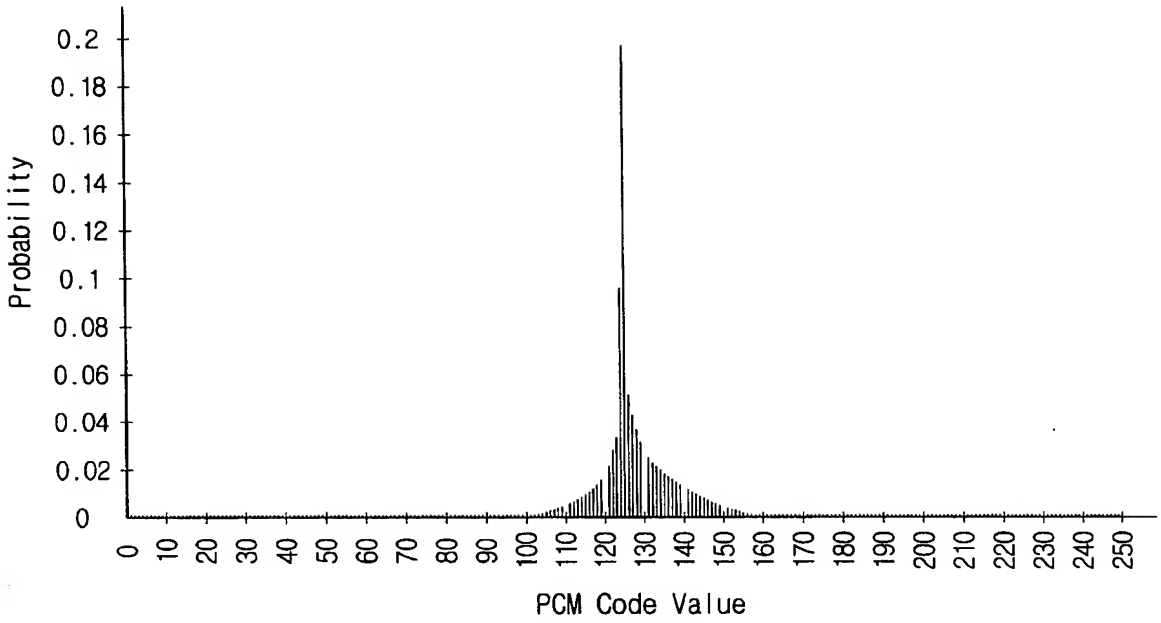
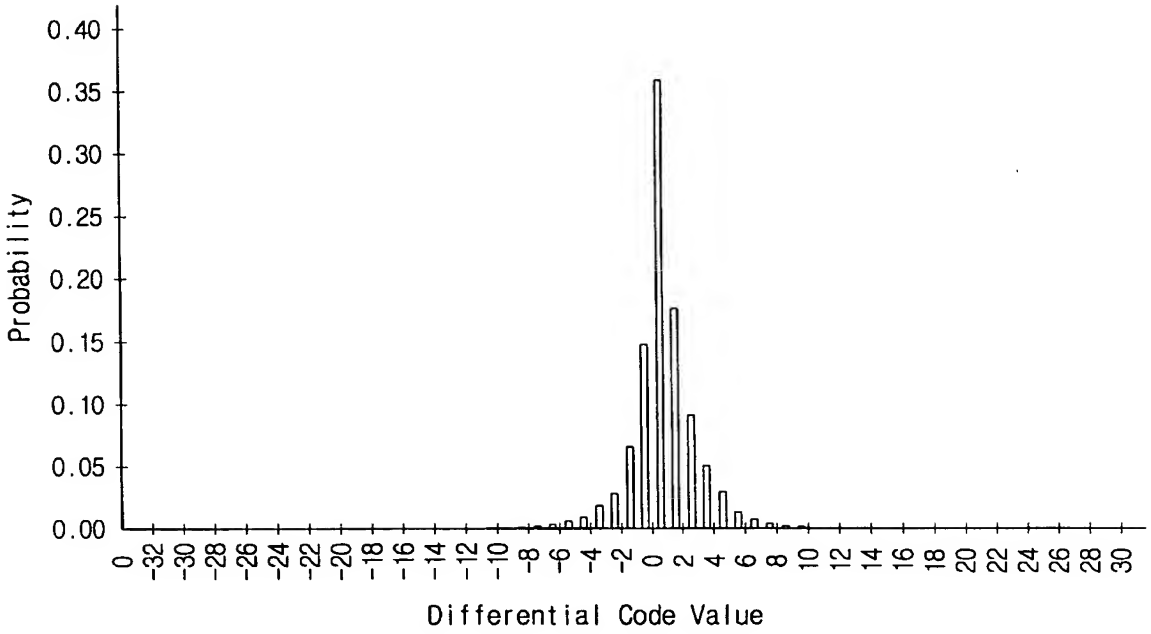

Probability
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250
PCM Code Value

Figure 7


Probability
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
-32
-30
-28
-26
-24
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
Differential Code Value